

Creation of a Connected Vehicle Safety Ecosystem

COVESA All Member Meeting
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Current Approach to Selling Automotive Technologies Leads to Missed Opportunities

Common Approach

Focus on technology

Focus on own solution

Focus on cost

Result

Lose context of need/want

Lose sight of eco-system

Lose sight of value



New Approach

- Use storytelling to clarify end-user value under specific scenarios.
- Allows each eco-system member to showcase the value they bring to each step in the continuum of end-user need.
- Guides the technical interfaces and business models between eco-system members.
- Yields solution that can be packaged for the market.

Journey Map Framework (1 of 2)

Imagery

Cartoons, animated presentations, or demonstrations that bring storyline to life

Storyline

Overall story that we're bring to life.

Value Proposition

The value that each company and technology brings to this story.



Sophia is a 24-year-old professional that is commuting to work in her new EV.

A tanker truck abruptly changes lanes, collides into Sophia's car, and forces the driver of a rental car to swerve into a nearby lake. The embedded vehicular emergency sensor triggers the submersion escape system in the rental car and instantaneous IP notification for emergency services in all vehicles. ¹

- Automated submersion system enables rental car occupants to escape quickly.
- Instantaneous IP notification enables accurate and prompt implementation of rescue services and start of emergency response.

Recognizing that a collision has occurred, all three vehicles automatically flash hazard and other vehicle lights at a faster rate so that other drivers have more time to react, and Emergency Responders can see them.

- Conspicuous lighting protects scene, gives other motorists time to slow down and move over, and helps locate vehicles that has left the roadway.

In parallel, on-coming drivers receive an alert in their in-dash system so that they have even more time to react to the upcoming crash scene.






- Digital alerts work in tandem with lighting alerts to protect the scene and give motorists time to slow down and move over.

The nearby E911 center is notified and dispatches a police car, fire truck, and ambulance to the scene.

- Timely notification of vulnerable vehicle location reduces response time and further collision risk.

1. Separate Journey Maps can be used to capture the stories for the tanker truck and rental car occupants since they unlock different solutions and value propositions. The following scenes will focus on Sophia.

Journey Map Framework (1 of 2)

	Scene 5	Scene 6	Scene 7	Scene 8	Scene 9
Imagery Cartoons, animated presentations, or demonstrations that bring storyline to life					
Storyline Overall story that we're bringing to life.	<p>The E911 Dispatcher sees that the tanker truck has leaked potentially hazardous materials onto the road.</p>	<p>Fire responders are provided a VIN-specific extrication guide for Sophia's EV.</p>	<p>Sophia sees a map indicating her location with icons for the responding vehicle location and their projected ETA.</p> <p>In parallel, family/emergency contacts are notified and provided the same map.</p>	<p>Responders arrive on scene and safely remove Sophia from her vehicle.</p>	<p>Sophia seems OK but is taken to the hospital for further medical evaluation.</p> <p>Vital health parameters are transmitted to the hospital while in transit.</p> <p>Family/emergency contacts are updated.</p>
Value Proposition The value that each company and technology brings to this story.	<ul style="list-style-type: none"> • LiDAR/radar/camera 3D point cloud let's E911 Dispatcher assess scene and better inform emergency & incident responders what to expect • Point Cloud image protects privacy since no identifying information is visible. 	<ul style="list-style-type: none"> • Emergency Responders can safely extract victims without compromising the vehicle's power wiring or battery system that may lead to fire or hazardous materials being spilled into environment. 	<ul style="list-style-type: none"> • Piece of mind that someone is on their way and when they will arrive. • Awareness that a loved one is in danger, but help is on the way. 	<ul style="list-style-type: none"> • Reduced response time decreases risk of secondary collision. • Proper on-scene care minimizes complications. 	<ul style="list-style-type: none"> • Sophia is safe and can focus on recovery. • Sophia's family knows that she's OK and where to meet her.

Call to Action

Let's work together to build out other scenarios

- Commercial Fleet Vehicular Emergency
- Submerged Vehicle
- Driver Health Event
- Rental Car Stolen Vehicle Public Safety Awareness
- Driverless Robotaxi Public Safety Awareness
- Others...

Next Steps

Join Safety Birds of a Feather Discussion
November 9, 2023 @ 12:00 pm Eastern
See COVESA Community Calendar for details
wiki.covesa.global

- Capture new scenarios.
- Select those to initially move forward.
- Leverage Journey Maps as organizing principal.
- Define relevant technical standards, interfaces, etc.
- Define resulting business models.